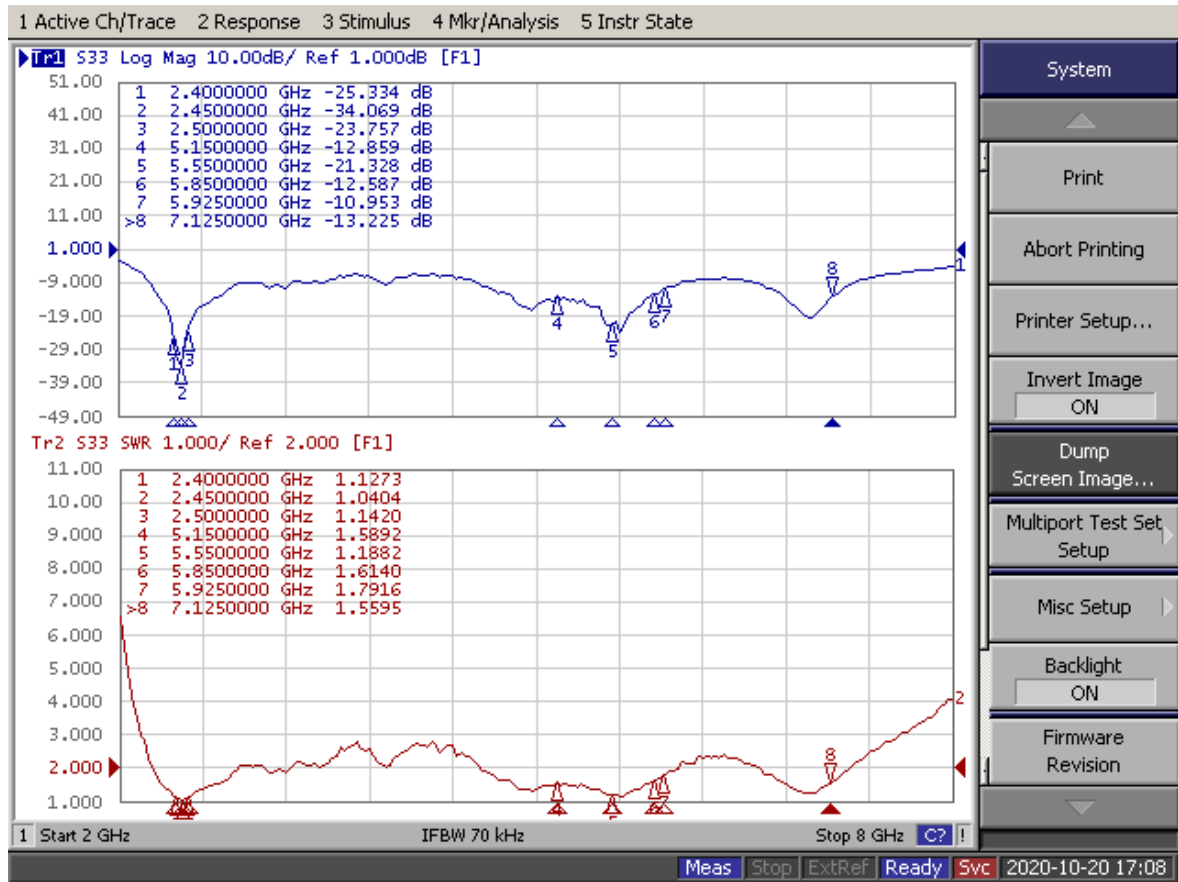


Wi-Fi 6/6E External Antenna
ATW6-19170-3.0BT

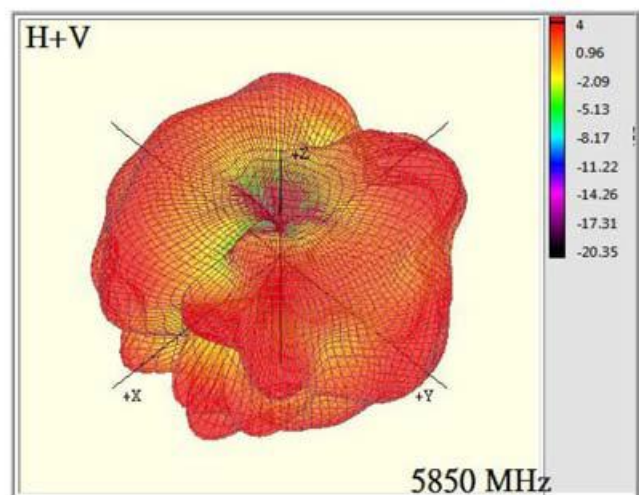
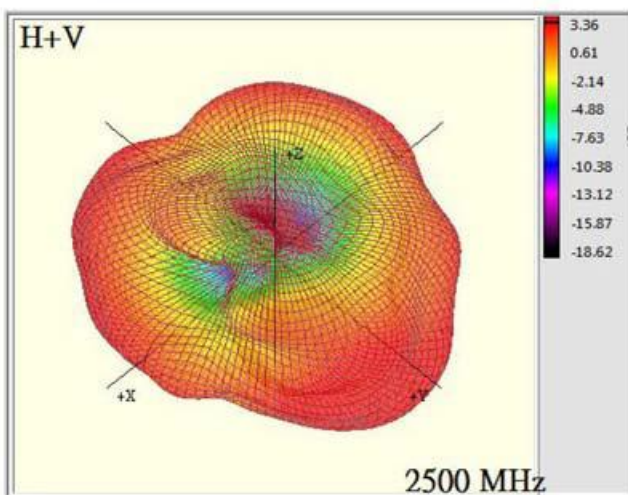
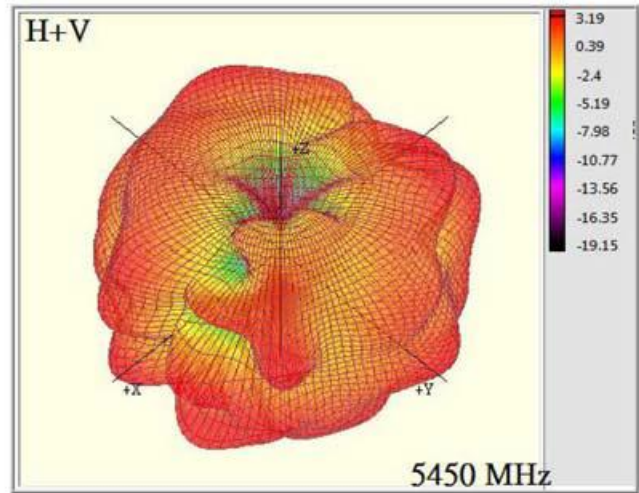
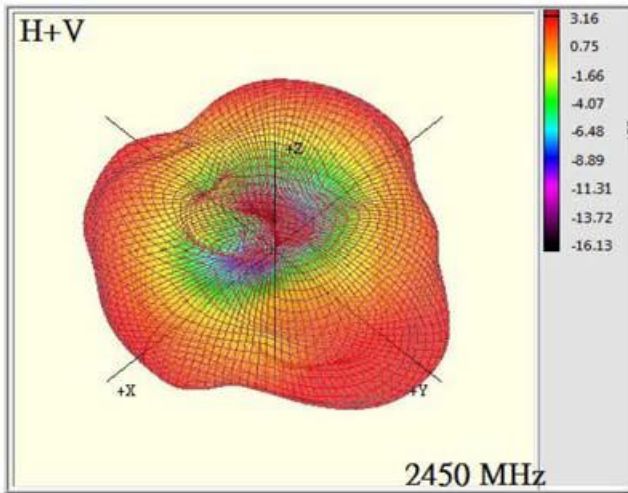
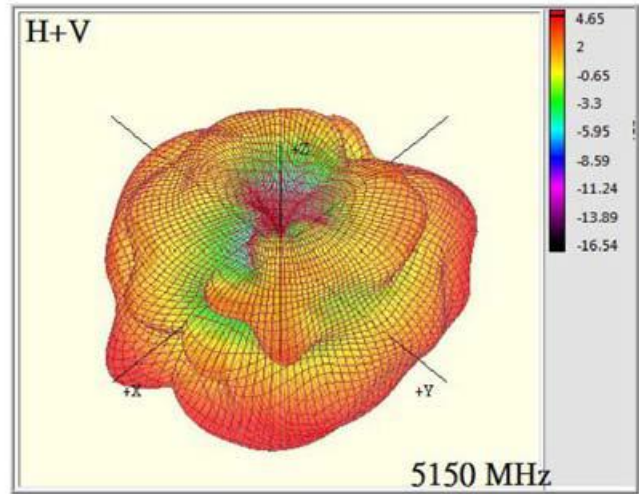
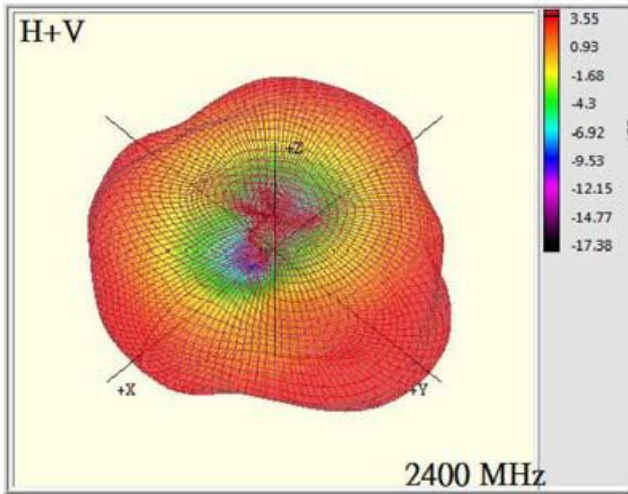
1. Specification

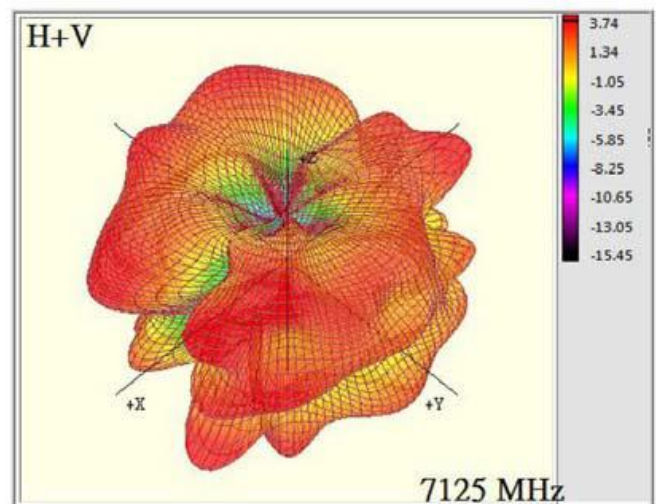
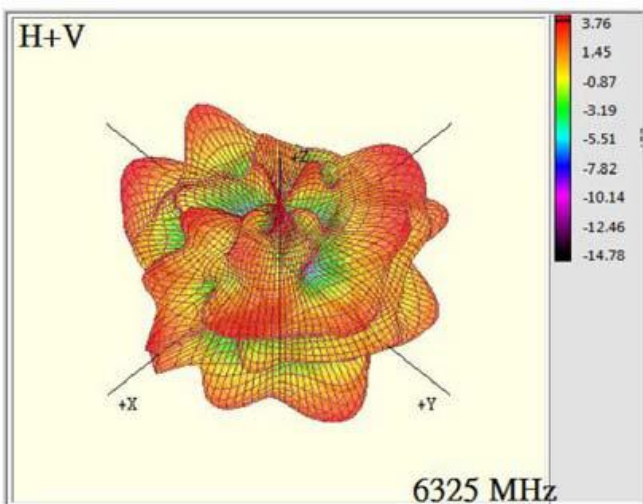
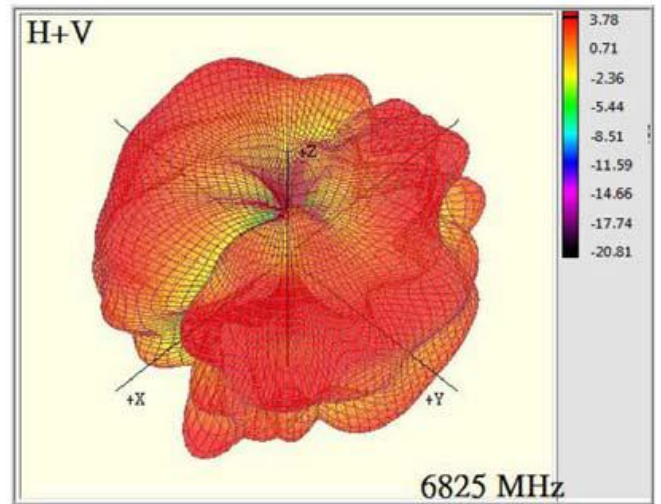
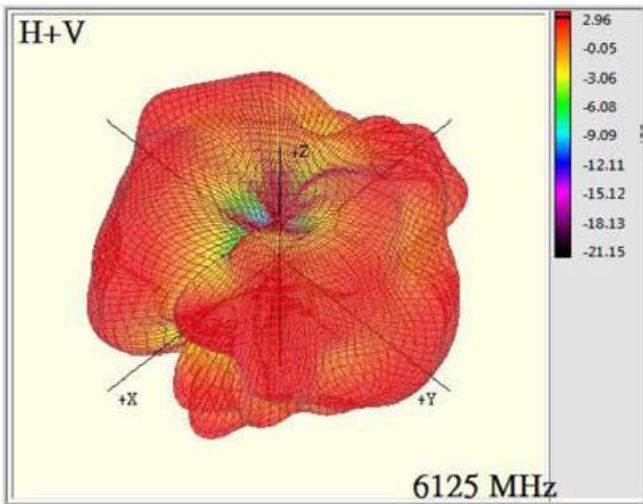
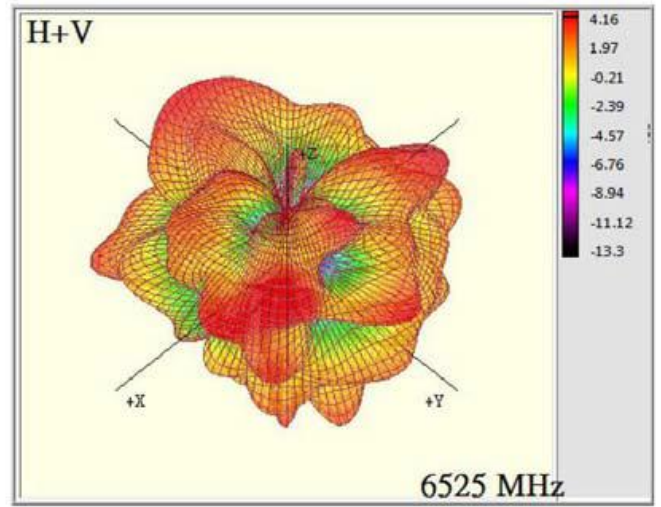
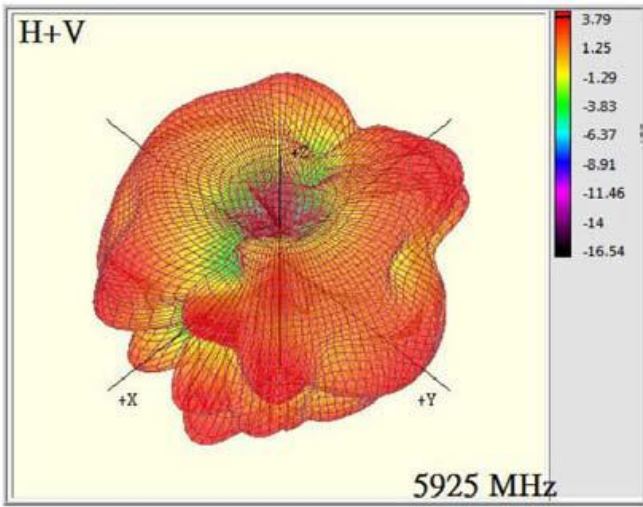
CHARACTERISTICS	SPEC
Center Frequency	2400 ~ 2500 MHz 5150 ~ 5850 MHz 5925 ~ 7125 MHz
V.S.W.R	<= 2.0 @ 2400 ~ 2500 MHz <= 2.0 @ 5150 ~ 5850 MHz <= 2.0 @ 5925 MHz / <= 2.0 @ 7125 MHz
Gain	3 ~ 4 dBi
Polarization	Linear
Impedance	50Ω
Material of Radiator	PCB
Material of Plastic	ABS/POM
Cable Type	RG-178U
Connector Type	SMA Male Reverse
Operation Temperature	- 40 °C ~ + 85 °C
Storage Temperature	- 40 °C ~ + 85 °C
Antenna Color Storage life	< 2 year

2. Antenna - S Parameter Test Data



3. Antenna – Radiation Pattern Test Data





Total Polarization

Frequency (MHz)	2400	2450	2500	5150	5450	5850
Tot. Rad. Pwr. (dBi)	-0.961	-1.583	-1.722	-1.163	-1.593	-1.168
Peak EIRP (dBi)	3.459	3.018	3.088	4.197	2.522	4.002
Directivity (dBi)	4.42	4.601	4.809	5.36	4.115	5.17
Efficiency (dB)	-0.961	-1.583	-1.722	-1.163	-1.593	-1.168
Efficiency (%)	80.148	69.455	67.273	76.498	69.294	76.426
Gain (dBi)	3.459	3.018	3.088	4.197	2.522	4.002

Frequency (MHz)	5925	6125	6325	6525	6825	7125
Tot. Rad. Pwr. (dBi)	-1.636	-2.335	-2.804	-2.47	-2.103	-1.979
Peak EIRP (dBi)	3.751	2.867	3.716	4.12	2.957	2.94
Directivity (dBi)	5.388	5.202	6.52	6.59	5.06	4.919
Efficiency (dB)	-1.636	-2.335	-2.804	-2.47	-2.103	-1.979
Efficiency (%)	68.608	58.41	52.433	56.624	61.613	63.405
Gain (dBi)	3.751	2.867	3.716	4.12	2.957	2.94

4. Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423.48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423.28-82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T2423.17-93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5% Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T2423.4-93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90% Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T2423.22-87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T2423.2-89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU

5. Mechanical Drawing

